



Communicable Diseases (CD) Quarterly Report

San Mateo County Health Department
CD Control Program

- Provider Reporting: 650.573.2346 (phone) 650.573.2919 (fax) • Issue No. 2 • Data to Dec 31, 2007
- Catherine Sallenave, MD, CD Controller • Scott Morrow, MD, Health Officer

Table 1. Selected CD cases reported in San Mateo County Residents

Disease	2007		2006	
	4th Qtr	YTD	4th Qtr	YTD
Amebiasis	2	7	0	8
Brucellosis	1	1	1	1
Campylobacteriosis	29	184	39	161
Coccidioidomycosis	1	8	0	6
Cryptosporidiosis	1	8	3	13
Dengue	0	2	0	0
E.Coli 0157:H7	3	10	2	12
E.Coli 0157:H7 with HUS	1	1	0	1
E.Coli non-0157:H7, shiga toxin +	0	1	3	3
Giardia	13	69	21	69
H. Flu, Invasive Disease	0	2	1	1
Leptospirosis	0	1	0	0
Listeriosis	0	4	0	3
Malaria	2	6	0	3
Meningitis — Bacterial	0	2	0	2
Meningococcal Meningitis	0	0	0	1
Meningitis — Viral	0	10	1	9
Meningitis — Fungal	1	3	0	0
Meningitis — Unknown	1	1	0	0
MRSA	218	933	125	850
Non- cholera Vibrio	1	6	1	13
Yersiniosis	0	4	0	13

Table 2. Selected Vaccine Preventable Diseases reported in San Mateo County Residents

Disease	2007		2006	
	4th Qtr	YTD	4th Qtr	YTD
Hepatitis A	1	13	1	7
Measles	0	0	0	1
Mumps	0	0	0	1
Pertussis	2	16	10	50

Table 3. Salmonella/Shigella cases reported in San Mateo County Residents

Disease	2007		2006	
	4th Qtr	YTD	4th Qtr	YTD
TOTAL SALMONELLA	18	108	32	142
S. Enteritidis	5	14	10	34
S. Typhimurium	1	4	4	16
S. Newport	1	6	1	10
Other	5	29	11	48
Unknown/Pending	6	55	6	34
Typhoid Fever (S. typhi)	0	7	1	6
Typhoid Carrier	0	2	0	0
TOTAL SHIGELLA	2	26	7	37

Table 4. Outbreaks in San Mateo County

Disease	2007		2006	
	4th Qtr	YTD	4th Qtr	YTD
GI — ALL	6	24	29	39
Norovirus (confirmed)	3	13	7	6
Unspecified/Other	3	11	22	33
RESPIRATORY — ALL	0	3	0	1
Influenza (A/B)	0	1	0	0
Influenza A	0	1	0	1
Unspecified	0	1	0	0

Focus on MRSA

Methicillin-resistant Staphylococcus aureus (MRSA) is differentiated from other strains of *S. aureus* by the presence of the *mecA* resistance gene. Once primarily a nosocomial or healthcare-associated (HA) infection, MRSA is now an increasingly prevalent community-associated (CA) pathogen. **CA-MRSA isolates usually have different molecular and antimicrobial susceptibility characteristics from HA-MRSA.** There are 3 major reservoirs of **HA-MRSA**: patients, healthcare workers (HCWs) and the inanimate environment. MRSA is most commonly spread from one patient to another by HCWs.

Clusters or outbreaks of **CA-MRSA** infections have affected athletic teams, prison inmates, military recruits, children in day care centers, men who have sex with men, drug users, tattoo recipients and hurricane evacuees in shelters. **Factors that facilitate transmission include crowding, frequent contact, compromised skin, contaminated surfaces and shared items.**

Patients infected with CA-MRSA frequently present with skin or soft tissue infections, but may develop necrotizing pneumonia, necrotizing fasciitis, rapidly fatal septicemia, endocarditis, or osteomyelitis. **Exclusion of patients from school, work or sports activities should be reserved for those that are unable to keep the infected skin covered with a clean, dry bandage and/or are unable to maintain good personal hygiene.**

Incision and drainage (I&D) should be performed in patients with purulent skin lesions (abscesses, pustular lesions, boils that are often attributed to "spider bites"). **Material should be cultured. Multiple antibiotics can be used to treat CA-MRSA infections:** i.e. clindamycin, provided the isolate is not resistant to erythromycin, TMP/SMX, tetracyclines, rifampin in combination with another agent and linezolid. Empiric antimicrobial therapy may be needed initially but antibiotics should be adjusted as needed based on susceptibility results. **Clinicians may refer to http://www.cdc.gov/ncidod/dhqp/pdf/ar/AMA_Flyer_Final.pdf for guidelines on outpatient management of skin and soft tissue infections.**

Approximately 32% of the population is colonized with *S. aureus* and 1% is colonized with MRSA. **CA-MRSA infections frequently recur in individuals and can spread within families, thus decolonization regimens may have a role in preventing recurrent infections, but only after treating active infections, reinforcing hygiene and appropriate wound care.**

For more information, please refer to the health department website: www.smhealth.org/mrsa. MRSA is reportable to the San Mateo County Health Department. Physicians are encouraged to report cases using the CMR.

[†]Sources: Automated Vital Statistics System (AVSS)

Note: Morbidity is based on date of diagnosis. Totals for past quarters may change due to delays in reporting from labs and providers.

Authors: Swati Deshpande and Catherine Sallenave